REMARKS/ARGUMENTS

In response to the Office Action mailed August 12, 2008, Applicants amend their application and request continued examination. In this Amendment, no claims are cancelled and new claim 10 is added so that claims 1-10 are now pending.

Amended claim 1 remains the sole pending independent claim. That claim is clearly supported by the description of the patent application particularly with respect to the embodiments described in the patent application and pertaining to Figures 15-17. These figures are described at pages 11 and 12 of the patent application. Amended claim 5 is particularly supported by the embodiment illustrated in Figure 17.

In the Office Action mailed August 12, 2008, claims were rejected as unpatentable over Fujinami (JP 11-118380) or Fujinami in view of Satou (JP 10-339594). To the extent this rejection has any vitality with respect to the claims now pending, it is traversed.

Neither Fujinami or Satou describes the arrangement of fins with cut-raised portions that are substantially trapezoidal as described expressly in claim 1. While the word "trapezoidal" is not used in that claim, it is apparent to anyone with rudimentary understanding of plane geometry that the description of the cut-raised portions as having first and second opposed side ends that are different in length describes an element with, in plan, a trapezoidal shape. As to this point, further attention is directed to Figures 15-17 of the patent application.

Because of the shape of the cut-raised portions and the orientation of those cut-raised portions with respect to the corresponding heat exchange tube, as described in amended claim 1, the heat transfer area of the cut-raised portions is increased over that of rectangular cut-raised portions. Accordingly, when the first fluid, which flows through the heat exchange tubes, is a coolant, heat efficiently flows from the second fluid to the heat exchanger tube. The flow takes place along a direction perpendicular

to the two bases of the trapezoid that are of different length and are parallel to each other, providing an important advantage.

In addition, the cut-raised portions reduce the thermal communication between the upstream edge of the fin and the heat exchanger tube. The resulting change in temperature distribution along the upstream edge of the fin results in reduced frost formation at that location. Frost formation is decreased because the temperature of the upstream edge of the fin at that location is somewhat increased. At other parts of the fin, not as close to the heat exchanger tube, there may be frost formation. By increasing the relative temperature of the upstream edge of the fin near the cut-raised portion, locally reducing frost formation, frost formation is more uniform along the upstream edge of the fin. Otherwise, because of the cooling provided the first coolant flowing through the heat exchanger tube, a locally lowered temperature would increase the local frost formation. Accordingly, the cut-raised portions, with the geometry and orientation described in amended claim 1, prevent an increase in flow resistance to the flow of the second fluid across the fin.

Fujinami and Satou fail to describe not only the structure as described in the claims presented here but also fail to describe or suggest the advantages achieved by the claimed structure.

Reconsideration and allowance of claims 1-10 are earnestly solicited.

Respectfully submitted,

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Date: November 11, 2008
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